Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with A++Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test I – February 2023

Semester IV

Class : II B.P.Ed **Time : 2 Hours**
Branch : Physical Education **Max. Marks : 60**

21BPDC25 Kinesiology and Biomechanics

Course outcome

CO1. Identify biomechanical, health, physiological, and psychological limitations to and interventions for improving physical performance.
CO2. Analyse and explain the mechanisms underlying biomechanical, physiological, and psychological changes that occur during after acute and chronic exercise.
CO3. Develop physical conditioning programs based on scientific principles designed to develop physical fitness and improve athletic performance.
CO4. Understand mechanical principles can be applied to the analysis of human movement to assess and improve performance and reduce risk of injury.
CO5. Know effectiveness of human movement using mechanical principles.

Part –A **1x6=6**

Answer all the questions

1 Which type of Lever is most effective in sports movements? CO2K1
a. Third class b. Second class c. First class d. Medium class

2 Force generation but fiber lengthening is also known as CO2K3
a. Eccentric Contraction b. Concentric contraction
c. Isometric contraction d. Isokinetic contraction

3 Trapezius muscle is helps in _____ CO2K5
a. Pushing the neck backward b. Pushing the neck forward
c. Punching d. Raising the leg forward

4 Newton's Second law of motion can be applied in sports like CO2K1
a. Baseball b. Swimming c. Football d. Both a & c

5 Functions of long bones in the body is to _____ CO2K3
a. Give strength b. Give Protection
c.. Act as lever d. Provide surface area for muscle attachment

6 Bending forward of the trunk is an example of movement in the _____ CO2K5
a. Frontal Plane b. Transverse Plane
c. Sagittal Plane d. Longitudinal plane

Part B

Each answer should not exceed 400 words or two pages **3x6=18**

7 (a).Give short notes on centre of gravity.CO3K2

(or)

7. (b).Explain angle of pull and reciprocal innervations. CO3K2

8 (a). Describe the classifications of musclesCO2K4

(or)

8. (b).Write about the different types of joints. CO2K4

9 (a).Explain the importance of kinesiology and biomechanics in sports.CO2K3

(or)

9. (b).Define force and explain its types. CO2K3

Part C

Each answer should not exceed 800 words or two pages **3x12=36**

10 (a).	Briefly explain about the fundamental movements in joints.	CO3K1
	(or)	
10.(b).	Write about axis and planes for body motion.	CO3K3
11.(a).	Write about the types and importance of good posture.	CO2K4
	(or)	
11.(b)	Describe about the different types of muscular contraction.	CO2K4
12.(a).	Write about equilibrium and its types.	CO2K3
	(or)	
12.(b)	Explain the history of kinesiology and bio mechanics.	CO2K3